The United States of America Meeting Its Commitment to Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons



April 2000



President Bill Clinton and Russian President Boris Yeltsin sign a joint declaration on parameters on future reductions in nuclear forces following talks at the Helsinki Summit on March 21, 1997.

### Foreword

The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is the centerpiece of international efforts to prevent the spread of nuclear weapons, to promote nuclear arms control and disarmament, and to facilitate the peaceful uses of nuclear energy. The United States strongly supports the NPT and remains firmly committed to all its aims, including the systematic and progressive reduction of nuclear weapons globally, with the goal of their ultimate elimination.

The end of the Cold War has led the United States to dramatic and irreversible reductions in its nuclear arsenal. Since the fall of the Berlin Wall, we have dismantled about 60% of our nuclear weapons. Most of our nuclear-weapon production facilities are being dismantled, committed to civil use, or working toward eliminating nuclear weapons. We will be placing 226 tonnes of weapon-usable material under international supervision to ensure that it is never again used for weapons purposes. We will also seek to identify additional amounts of fissile material for irreversible removal from weapon programs. Working closely with Russia, the United States and others are engaged in efforts to dismantle weapon systems to be eliminated under START; to seal up former nuclear test sites; to secure, monitor, and dispose of vast stores of weapon-usable materials; to create employment alternatives for former nuclear-weapon scientists; and to downsize and convert nuclear-weapon facilities. We have also worked with our allies to reduce the number of nuclear weapons within NATO by over 85% since 1991. Nuclear weapons now play a smaller role in our defense posture than at any time since the nuclear age began.

The United States has devoted more time, effort, and resources to nuclear arms control and disarmament than any other country. I am certain this will continue. As we enter this new millennium, we should all commit ourselves anew to achieving a world free of nuclear weapons. The United States remains committed to this goal and will work tirelessly toward its ultimate achievement.

—President Clinton

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1989	U.S. removes last INF missiles from Europe, all of which were subsequently eliminated U.S. Senate ratifies the Threshold Test Ban Treaty and the Peaceful Nuclear Explosions Treaty	passes legislation establishing Cooperative Threat Reduction program with Russia	U.S. announces that it will not produce plutonium for nuclear weapon purposes  U.S. law establishes moratorium on nuclear testing  U.S. Senate gives advice and consent to START I ratification	President Clinton extends the moratorium on nuclear testing  U.S. declares intent to withdraw excess fissile material from its weapon program  U.S. and Russia sign HEU purchase agreement  U.S. proposes a multilateral treaty to halt production of fissile material for nuclear weapons  U.S. dismantles approximately 6,500 nuclear bombs and warheads since
1		1991		fall of the Berlin Wa <mark>ll</mark>
Berlin Wall falls	33.		1992	1993
			Under the Lisbon Protocol, Ukraine, Belarus, and Kazakhstan agree to be START I parties and join the NPT as non-nuclear- weapon states	U.S. and Russia sign START II
		U.S.–Russian Presider reduce non-strate		

		U.S. Senate gives advice and consent to ratification of START II			
U.S. Nuclear Posture Review codifies reduced role of U.S. nuclear weapons	President Clinton orders over 200 tonnes of excess fissile material withdrawn from the U.S. weapon program	U.S. signs relevant protocols of South Pacific and African nuclear-weapon-free zone treaties			U.S. extends Cooperative Threat Reduction umbrella agreements with Russia and Ukraine to 2006
1994	1995	U.S. signs CTBT	IAEA begins to verify HEU downblending in the U.S.	U.S. Nuclear Cities Initiative begins in Russia	U.S. dismantles over 13,000 nuclear bombs and warheads since the fall of the Berlin Wall
Presidents Clinton		1996	1997	1998	1999
Presidents Clinton and Yeltsin agree to detarget strategic nuclear missiles	U.S. and Russia announce that no		1997	1998	1999
and Yeltsin agree to detarget strategic	U.S. and Russia announce that no newly produced fissile material will be used to manufacture nuclear weapons NPT extended indefinitely	U.SRussian-IAEA Trilateral Initiative begins	U.S. and Russia agree to START III principal elements	U.S. and Russia affirm intention to withdraw up to 50 tonnes of plutonium from nuclear-weapon programs	U.S. and Russia begin START III discussions  NATO's Strategic Concept reflects the Alliance's greatly reduced reliance on nuclear weapons

I.

### Introduction

A rticle VI of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) states:

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.

At the 1995 NPT Review and Extension Conference, the parties were not only called upon to review the Treaty but also to take an historic decision on the Treaty's future. In the context of the decision to extend the Treaty indefinitely, a decision was also taken on "Principles and Objectives for Nuclear Non-Proliferation and Disarmament." Paragraph 4(b) of that decision included the following as part of a program of action for Article VI:

The determined pursuit by the nuclear-weapon States of systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goals of eliminating those weapons, and by all States of general and complete disarmament under strict and effective international control.

As set forth in this document, the United States is fulfilling its obligations under Article VI and is doing so as expeditiously as possible. This is demonstrated by the unprecedented U.S. progress toward reducing nuclear arms through unilateral actions and verifiable bilateral treaties; by the U.S. moratorium on nuclear testing and signature of the Comprehensive Nuclear Test-Ban Treaty; by the halt in the U.S. production of fissile material for nuclear weapons; by the strong U.S. support for a Fissile Material Cutoff Treaty (FMCT); by the downsizing of the U.S. nuclear-weapon infrastructure; by the diminished role of nuclear weapons in U.S. defense policy; by long-standing U.S. security assurances and support for nuclear-weapon-free zones; and by efforts of the United States and Russia, together with other successor states of the Former Soviet Union, to reduce nuclear dangers resulting from the Cold War's nuclear legacy. The combined effect of these efforts is unprecedented progress toward achievement of the ultimate goal of a world free of nuclear weapons.

## The nuclear arms race has ended, and the United States is drastically reducing its nuclear-weapon arsenal

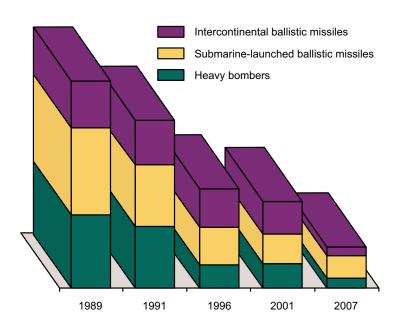
The United States has eliminated more than a dozen different types of nuclear warheads and has reduced the number of nuclear weapons by about 60%.

Since the end of the Cold War, the United States has reduced its nuclear weapons about 60% and is committed to further reductions. Achievement of arms levels agreed to by Presidents Clinton and Yeltsin for the third Strategic Arms Reduction Treaty (START III) would represent a reduction in strategic force levels of 80%.

#### **Nuclear-Weapon Reductions**

The United States is progressively and systematically reducing its nuclear forces, both through negotiated and unilateral

Deployed U.S. Strategic Warheads



actions. The United States has eliminated more than a dozen different types of nuclear warheads and has reduced the number of nuclear weapons by about 60%. This results from the dismantling of over 80% of non-strategic nuclear weapons and almost 50% of strategic nuclear weapons.

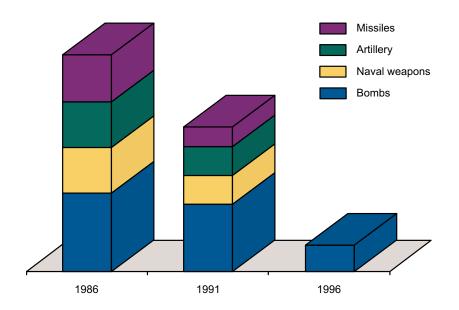
Deep strategic nuclear reductions were preceded by the 1991-1992 unilateral Presidential Nuclear Initiatives. As part of these initiatives, the U.S. has denuclearized its Army, Marine Corps, and its air and surface Navy. All U.S. non-strategic nuclear weapons (including nuclear cruise missiles, depth charges, and torpedoes) were removed from surface ships, submarines, and land-based naval aircraft bases. In 1992, the United States completed the worldwide withdrawal and retirement of the U.S. stockpile of nuclear artillery shells, Lance missile warheads, and naval nuclear depth bombs. During the Cold War, the United States had fourteen different non-strategic nuclear-weapon systems; today it has two, only one of which is deployed.

The United States is already below the 2001 final START I limit of 1,600 heavy bombers and deployed ballistic missiles with their launchers. Ballistic missile systems to be eliminated under START I have been deactivated:3,900 nuclear warheads have been removed from Minuteman and Poseidon missiles. All U.S. heavy bombers to be eliminated under START I have been moved to an elimination facility, where they are being destroyed.

Under START II, the United States and Russia will achieve deeper reductions in strategic nuclear forces. This Treaty will enhance strategic stability by eliminating the most destabilizing weapon systems—land-based intercontinental ballistic missiles (ICBMs) with multiple warheads. Once

Deployed U. S. Non-Strategic Nuclear Forces

Since the fall of the Berlin Wall, the United States has dismantled over 13,000 nuclear warheads and bombs, averaging about 100 per month.



START II enters into force and is fully implemented, deployed U.S. strategic nuclear warheads will be reduced by two-thirds from Cold War peak levels.

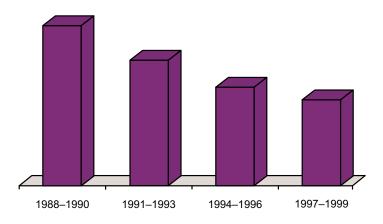
START III discussions have already begun and could result in even greater strategic nuclear-weapon reductions by establishing a ceiling of 2,000–2,500 deployed strategic warheads each for the United States and Russia. This would represent an 80% reduction of deployed strategic weapons since the end of the Cold War. Moreover, consistent with the Helsinki Joint Statement, START III is intended to be the first strategic arms control agreement to include measures relating to the transparency of strategic nuclear-warhead inventories and the destruction of strategic nuclear warheads.



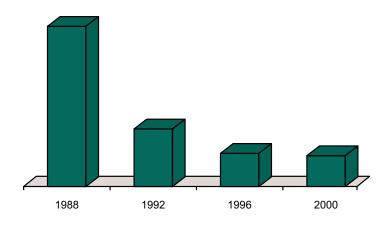
Averaging approximately 100 warheads per month, the Pantex plant in Texas has dismantled unprecedented numbers of U.S. nuclear weapons.

The United States has not conducted nuclear weapon test explosions since September 1992.

The United States has been dismantling nuclear weapons at a rapid pace. Since the fall of the Berlin Wall, the United States has dismantled over 13,000 nuclear warheads and bombs, averaging about 100 per month.



U.S. Nuclear Warhead Stockpile



Number of Warheads in the U.S. Non-Strategic Nuclear Forces Stockpile

#### **Ending Testing**

The United States has not conducted nuclear-weapon test explosions since September 1992. President Clinton has recently stated that the moratorium on testing will continue. Conducting no nuclear test explosions will effectively constrain the development and qualitative

improvement of nuclear weapons and end the development of advanced new types of nuclear weapons.

Entry into force of the Comprehensive Nuclear Test-Ban Treaty (CTBT) remains a high priority. President Clinton has said the CTBT "points us toward a century in which the roles and risks of nuclear weapons can be further reduced, and ultimately eliminated."

The United States pursued a lead role in the negotiation and conclusion of the CTBT. In September 1996, President Clinton was the first world leader to sign the Treaty. The CTBT, currently with more than 150 signatories, bans all nuclear-weapon test explosions and all other nuclear explosions.

Although the U.S. Senate voted not to give its consent to ratification of the CTBT, the United States remains committed to securing the Treaty's entry into force at the earliest possible time and has established a special task force to work toward this objective. The U.S. has enlisted the help of General John Shalikashvili, former Chairman of the Joint Chiefs of Staff, to conduct a bipartisan dialogue aimed at eventually securing Senate advice and consent to ratification of the CTBT.

Here and in other host countries, the United States is installing or upgrading more than 20 International Monitoring System (IMS) stations. During the past three years, the United States has consistently worked in the CTBT Preparatory Commission for budgets that support a rapid buildup of the IMS. The United States continues to take the lead in developing the CTBT International Data Centre, especially the software used to receive, analyze, respond to, and archive the IMS data.

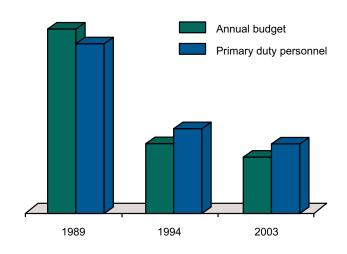
### The United States is downsizing its Cold War infrastructure

As the United States reduces the numbers of its nuclear weapons, it is also transforming the means to build them. Over the past decade, the United States has dramatically changed the role and mission of its nuclear-weapon complex from weapon research, development, testing, and production to weapon dismantlement, conversion for commercial use, environmental remediation, and stockpile stewardship.

The United States has taken numerous actions to reduce or consolidate its nuclear-weapon production complex. Since 1992, the workforce of the complex has been reduced by one-third. Of the 16 major sites and facilities that formed the core of the U.S. nuclear-weapon production complex during the Cold War, four are scheduled for closure or conversion to commercial use: the Rocky Flats Plant, where all production of plutonium pits occurred; the Mound Site and Pinellas Plant, which fabricated nuclear-weaponrelated components; and the Fernald Plant, where conversion and fabrication of uranium metal was undertaken. The Pantex Plant, fully engaged with the production of new weapons two decades ago, now only maintains the safety and reliability of existing weapons, while dismantling those warheads retired under a series of successive arms agreements reached as the United States emerged from the Cold War.

The United States has terminated all production of fissile material for nuclear

U. S. Department of Defense Nuclear Arms Budgets and Personnel

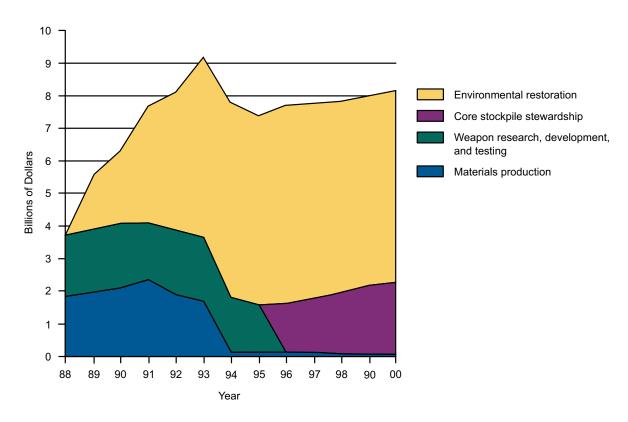


weapons and has taken steps to reduce the infrastructure involved in military material production. All U.S. military plutonium production reactors, which were located at the Hanford and Savannah River Sites, have been permanently shut down. Plutonium-separation facilities at the Hanford Site also have been permanently shut down, deactivated, or scheduled for deactivation pending final decommissioning. The plutonium-separation facilities at the Savannah River Site remain on standby to support non-military missions. All U.S. military enrichment facilities have either been converted to commercial use or deactivated pending eventual decommissioning. These include the Y-12 Calutron facilities and K-25 gaseous diffusion facility in Oak Ridge, the Portsmouth facility, and the Paducah facility.

The United States has terminated all production of fissile material for nuclear weapons. A major, new focus is on cleaning up the 50-year environmental legacy left at the industrial complex where nuclear weapons were designed and manufactured. The United States is managing the problems associated with the large quantities of various types of radioactive wastes, surplus nuclear materials, and spent nuclear fuel

that remain at its nuclear-weapon facilities and at nuclear-energy research and development sites. Over the past decade, the environmental restoration and management budget has become the dominant component in the U.S. nuclear-weapon program.

U. S. Nuclear-Weapon Annual Budgets



### The United States is reducing the role of nuclear weapons

Together with efforts to dismantle nuclear weapons, destroy nuclear delivery systems, and downsize its nuclear-weapon infrastructure, the United States has significantly reduced its nuclear-weapon posture. The United States' 1994 Nuclear Posture Review codified the diminished role of nuclear weapons in U.S. defense strategy, noting that "nuclear weapons are playing a smaller role in U.S. security than at any other time in the nuclear age."

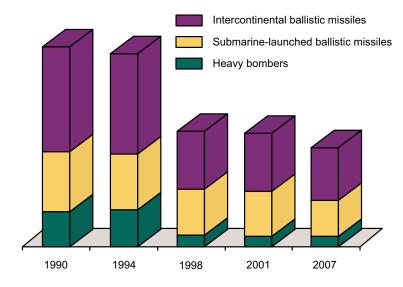
The reduced role of nuclear weapons is not only a matter of U.S. strategy or doctrine but also is reflected in U.S. deployment decisions, alert status, targeting policy, training, and budgets. Illustrating this reduced role, the United States has no new ballistic missile submarines or submarinelaunched ballistic missiles (SLBMs) under development, and the force of Trident submarines will be reduced from 18 to 14 over the next few years. The United States is not developing or producing any new ICBMs. It halted production of the B-2 bomber at 21, and all B-1 bombers have been dedicated exclusively to non-nuclear missions. Numerous weapon programs have been canceled, including both strategic and tactical nuclear systems and the production of new Peacekeeper ICBMs. In addition, there are currently no requirements to produce new nuclear weapons. In fact, the United States has not produced any new nuclear weapons since it entered the nuclear-explosive test moratorium.

U.S. nuclear-armed strategic bombers are no longer on alert, and the United States

targets no nation with its strategic nuclear forces on a day-to-day basis. U.S. ground forces no longer train for nuclear-delivery missions and have no nuclear capability. Reflecting these changes, the U.S. expenditure for strategic nuclear weapons and nuclear forces personnel has been reduced by nearly two-thirds since the fall of the Berlin Wall.

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The North Atlantic Treaty Organization's post–Cold War Strategic Concept likewise shows the Alliance's adjustment to the new nuclear reality. NATO has reduced its nuclear weapons by over 85% and has reduced the number of nuclear-weapon systems from eleven to one. The readiness criteria for the remaining systems have been considerably relaxed from minutes to weeks or months. In addition, NATO reliance on nuclear weapons has been greatly reduced.

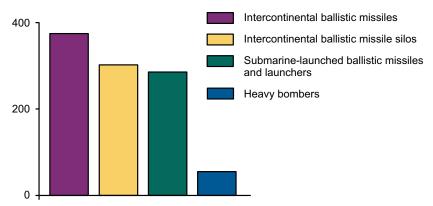
# The United States is spending billions of dollars on proliferation threat reduction in cooperation with Russia and the Newly Independent States

In addition to negotiation and implementation of arms control agreements, the United States has spent billions of dollars pursuing a host of complementary measures to address new proliferation challenges created by the end of the Cold War. These measures contribute directly to nuclear arms control and disarmament.

The U.S. program of Cooperative Threat Reduction with the Former Soviet Union is reducing nuclear dangers stemming from the legacy of the Cold War.

#### **Cooperative Threat Reduction**

The U.S. program of Cooperative Threat Reduction (CTR) with the Former Soviet Union is reducing nuclear and other dangers stemming from the legacy of the Cold War. The United States has already allocated \$3.2 billion to the pursuit of this goal. The CTR program was instrumental in helping Kazakhstan, Ukraine, and Belarus safely



In addition to assisting in the deactivation of nearly 5,000 strategic nuclear warheads, the U.S. CTR program has helped to eliminate the above weapon systems in Russia, Ukraine, and Kazakhstan.

return to Russia more than 3,000 strategic nuclear warheads and to eliminate strategic bombers and ballistic missiles. These states joined the NPT as non-nuclear-weapon states, thereby forswearing nuclear weapons.

The CTR program has assisted Russia in eliminating strategic offensive weapons to meet its START I reduction commitments. It has provided equipment and services for deactivation, destruction, or elimination in the Former Soviet Union of almost 5,000 stategic nuclear warheads, nearly 600 strategic missile launchers and silos, almost 60 heavy bombers, and nearly 500 ICBMs and SLBMs. Cooperation with Russia has enhanced security, control, and accounting of Russian nuclear weapons and fissile materials.

In 1992, a lack of suitable storage space in the Russian Federation was significantly slowing its warhead dismantlement process. Subsequently, the United States agreed to provide technical and financial support to construct a safe, secure, and environmentally sound storage facility capable of holding much of the total plutonium used in Russian nuclear warheads. The Mayak Fissile Material Storage Facility, currently under construction in Russia, is expected to provide capacity for thousands of containers holding weaponorigin plutonium. The United States and Russia have agreed that any material stored in this facility will not be reused for nuclear weapons.

### Securing Nuclear Materials and Expertise

An array of other cooperative programs is underway to address the security of nuclear materials and expertise in the Former Soviet Union.

Material Protection, Control, and Accounting. In the early 1990s, the United States and Russia established the Material Protection, Control, and Accounting (MPC&A) program. This program provides security support for nuclear sites in the Former Soviet Union that possess weapon-usable nuclear material that is not in weapon form. This effort reduces the threat of nuclear proliferation and terrorism by rapidly improving the security of weapon-usable nuclear material in Russia, the Newly Independent States, and the Baltics.

The MPC&A program also provides physical protection systems (security fences, hardened buildings and vaults, etc.) as well as nuclear material control and accounting systems at some 55 sites in the Former Soviet Union. By the end of 2000, the program will have improved the security of more than 400 tonnes of weapon-usable nuclear material stored and used at these sites. As of the beginning of 2000, the United States has allocated a total of \$717 million to this cooperative effort.

Second Line of Defense. Security at facilities is the first line of defense against nuclear theft and diversion. Together with Russia, the United States established the Second Line of Defense (SLD) program to combat the trafficking of nuclear and nuclear-related dual-use equipment, material, and technology if they are diverted from facilities. The SLD program reduces the threat of nuclear proliferation and terrorism by facilitating Russian efforts in strengthening its overall capability to prevent nuclear smuggling at border crossings, airports, and seaports.



The United States is working with Russia to address the problem of illicit trafficking in nuclear materials through detection systems at key border crossings, ports, and airports.

Nuclear Cities Initiative. With the end of the Cold War, Russia is closing large parts of its nuclear-weapon complex. Consequently, nuclear-weapon scientists in Russia and elsewhere seek to turn their talents to other endeavors. The United States has responded in several ways to facilitate a positive transition, including establishment of the International Science and Technology Center in Moscow and the Science and Technology Center in Kiev.

In 1998, the United States and Russia established the Nuclear Cities Initiative. This initiative focuses on ten closed nuclear cities where the Russian nuclear-weapon production infrastructure is concentrated.

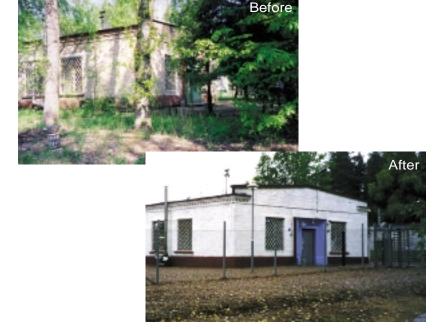


The U.S. CTR program has assisted Ukraine and Kazakhstan in eliminating hundreds of ICBM launch silos.

Working initially in these cities, the program assists the Russians in downsizing their weapon complex. It attempts to diversify the economies of the nuclear cities and to promote the transition of nuclear scientists to the commercial sector by introducing a variety of relevant businesses, training, and community development projects.



U.S. programs help secure weapon-usable nuclear material such as this plutonium-bearing spent fuel from Kazakhstan.



The U.S. program of material protection, control, and accounting provides major improvements in security of nuclear materials in the Former Soviet Union.

Initiatives for Proliferation Prevention. The main objective of the U.S. Initiatives for Proliferation Prevention (IPP) program is to provide sustainable, non-weapon-related work for scientists and engineers from the Former Soviet Union through commercial opportunities. IPP helps to identify opportunities for U.S. private corporations to invest in enterprises that create jobs in the Former Soviet Union and the United States. To encourage these enterprises, IPP provides seed funding for cooperation between U.S. industry and Former Soviet Union institutes in developing industrial partnerships, joint ventures, or other mutually beneficial arrangements. IPP projects currently engage over 3,500 technical staff in over 200 projects in the Former Soviet Union.

Other Initiatives. Other U.S. initiatives are also addressing fissile-material security in the Former Soviet Union. Through its "Operation Sapphire," for example, the United States cooperated with the government of Kazakhstan to airlift nearly 600 kilograms of high-enriched uranium (HEU) out of Kazakhstan for safe disposition in the United States. As noted previously, vital Material Protection, Control, and Accounting programs with Belarus, Kazakhstan, Ukraine, and the Baltic states are also in place.

## The United States is working to ensure the transparency and irreversibility of nuclear reductions and to end new material production

Ith the end of the Cold War, unprecedented reductions in nuclear-weapon programs have resulted in stockpiles of excess weapon-usable nuclear material. Efforts are underway to ensure that this nuclear material is never again used in nuclear weapons. In addition, the United States has stopped producing fissile material for nuclear weapons and strongly supports conclusion of a Fissile Material Cutoff Treaty.

Transparency and Irreversible
Disposition of Nuclear Materials

In 1993, President Clinton offered to make nuclear material declared to be excess to national security requirements available for International Atomic Energy Agency (IAEA) inspection, thereby providing for international transparency. Since that time, the United States has unilaterally removed approximately 226 tonnes of HEU and plutonium from its nuclear stockpile. This material will be made available for IAEA verification as soon as is practicable. Of this amount, the United States has identified 90 tonnes for IAEA inspection, which includes 12 tonnes of excess material at Oak Ridge, Hanford, and Rocky Flats that are already under IAEA inspection.

Trilateral Initiative. The U.S./Russian/IAEA Trilateral Initiative is developing means for the IAEA to verify that nuclear material declared excess to defense needs is never again used in nuclear weapons. The initiative includes the development of novel techniques for verifying materials still in classified or sensitive forms. It also includes development of a model verification agreement.

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U. S. Department of Energy Secretary Richardson, Russian Minister Adamov, and IAEA Director General ElBaradei at a technology demonstration for the Trilateral Initiative.

Transparency and Disposition of High-Enriched Uranium. In 1993, the United States agreed to purchase from Russia 500 tonnes of HEU that is being irreversibly converted to low-enriched uranium for sale as commercial fuel. More than 70 teams (tallying more than 40,000 inspection hours) have visited Russian facilities to monitor conversion operations. In 1996, the United States announced that it will eliminate its surplus HEU by blending down the material. To recover its economic value, the resulting low-enriched uranium will be sold and used, over time, as commercial nuclear reactor fuel. This low-enriched uranium cannot be used in nuclear weapons and will be made available for IAEA inspection.

In 1998, the IAEA verified the downblending of HEU at the Portsmouth Gaseous Diffusion Plant. This helped to demonstrate the irreversibility of U.S. nuclear reductions and provided valuable experience in international verification of the disposition of weapon-usable materials.



A U.S.-developed system can monitor the downblending of uranium, thereby providing greater transparency for reductions in nuclear stockpiles.

Currently, a total of 63 tonnes of surplus HEU is being transferred to the U.S. Enrichment Corporation for downblending to low-enriched uranium. Planning for the disposition of additional surplus HEU is underway.

Plutonium Disposition. In 1997, the United States announced a hybrid disposition strategy for surplus U.S. plutonium involving burnup of fuel in nuclear reactors or immobilization of plutonium in glass or ceramic form mixed with highlevel radioactive waste. Both approaches would convert the plutonium to forms as



IAEA inspectors verify excess HEU at the Oak Ridge Y-12 Plant.

inaccessible and unattractive for retrieval and weapon use as plutonium in spent fuel from commercial reactors.

The United States and Russia are close to concluding a bilateral agreement on plutonium disposition. Once the agreement is in place, both the United States and Russia will proceed with parallel disposition programs for 34 tonnes of surplus weapon-grade plutonium removed from their nuclear-weapon programs. This bilateral agreement is a major financial and technical undertaking that will take many years and sustained international involvement to implement.

### **Ending New Fissile Material Production**

Efforts to address excess fissile material are valuable in themselves, but they could be undermined if efforts to end new production of weapon-usable fissile material are not in place. The United States no longer produces fissile material for nuclear weapons and strongly supports efforts to complete a global treaty to end such production for weapons.

Plutonium Production Reactor Agreement. The United States and Russia agreed in 1994 to end production of military plutonium, signaling a new stage in U.S.-Russian cooperation to regulate and verify nuclear materials and to limit their use in weapons. Under this agreement, the 10 shut-down Russian plutonium-producing reactors and all 14 shut-down U.S. production reactors will be verified to ensure they remain closed permanently. In addition, plutonium produced by Russia's three remaining production reactors, which also supply heat and electricity to local populations, is to be monitored to ensure it remains outside of weapon programs. Further, in this agreement, the United States and Russia placed new limits on nuclear-weapon materials.

Fissile Material Cutoff Treaty. The United States remains committed to completing a multilateral, non-discriminatory and internationally and effectively verifiable treaty to end the production of fissile material for nuclear weapons or other nuclear explosive devices. The conclusion of such a treaty was called for in the Principles and Objectives decision at the 1995 NPT Review and Extension Conference.

An FMCT would provide significant nonproliferation, arms control, and disarmament benefits by limiting the amount of fissile material usable for nuclear weapons worldwide. The treaty would make legally binding the current voluntary moratoria on fissile material production for nuclear weapons by the United States, United Kingdom, France, and Russia and would extend the prohibition to all other parties. Additionally, it would extend verification measures to fissile material production facilities not currently subject to international monitoring.

Given the importance of limiting world-wide the amount of fissile material available for nuclear weapons, the United States will continue actively to support FMCT negotiations in the Conference on Disarmament in Geneva.



The U.S. program of nuclear-weapon dismantlement and disposition involves the safe and secure disassembly of plutonium "pits."

# VII.

## Moving forward

Recent arms control and disarmament accomplishments are truly significant. The agenda is now more extensive than ever, encompassing formal and informal arms control efforts to reduce strategic and non-strategic nuclear arms, to end nuclear-weapon testing, to downsize and refocus the nuclear-weapon infrastructure, to end production of unsafeguarded weapon-usable material, to enhance the security and transparency of excess defense material, and to ensure the irreversibility of nuclear arms reductions.

The nuclear arms control and disarmament agenda is proceeding with U.S. leadership, participation, and support on all fronts in a multitiered, step-by-step fashion. The United States continues to pursue negotiated agreements along with new and innovative programs involving U.S.—Russian bilateral cooperation in warhead dismantlement and material transparency. These programs not only address urgent problems but also create building blocks for progress in START III and beyond.

Prospects for continued progress in nuclear arms control and disarmament are strong. Along with START and other traditional approaches, the United States seeks to ensure that nuclear reductions are transparent and irreversible. The United States also seeks effective controls on the know-how to produce nuclear weapons, on existing excess fissile material, and on future production of fissile material for nuclear weapons.

There has been much debate about how to achieve a world free of nuclear weapons, about the preconditions necessary for achieving such a world, and about setting a timetable for achieving this ultimate objective. The United States is pursuing a full range of concrete measures that collectively move toward the shared objective of nuclear disarmament. Each incremental step taken toward this objective sheds more light on the next step. The incremental approach is practical and realistic and has been repeatedly demonstrated to be the quickest way forward.

This is why the United States supports the negotiation of a treaty that would halt the production of fissile material for weapons purposes. This is why the United States supports continued reductions in the START process. This is why the United States has taken numerous unilateral measures and engaged in far-ranging cooperative programs with Russia and other states.

No one can foresee all the incremental steps that will be necessary to achieve the ultimate goal or how fast they can be realized. Clearly, the climate of confidence cultivated by a strong and effective NPT is critical to future progress. A world no longer threatened by chemical and biological weapons and by missile systems to deliver these weapons, and a world where there are no destabilizing conventional arms buildups, will also accelerate the process. The United States is committed to this incremental process and will continue not only to take specific steps but also to work toward conditions that allow further steps.

The NPT has facilitated an impressive and continuing process of nuclear arms control and disarmament. In so doing, the Treaty has served to enhance international security, stability, and the prospects for peace.



